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## LIST OF SYMBOLS

$Re$	-	Reynolds number
$Pr$	-	Prandtl number
$Nu$	-	Dimensionless coefficient of heat transfer
$\dot{m}$	-	Mass flow rate
$G$	-	Mass flux
$S$	-	Flow surface
$N_p$	-	Tube pass
$N_t$	-	Tube numbers
$L$	-	Length
$D$	-	Diameter
$Q$	-	Heat load
$w$	-	Per unit mass work
$\dot{w}$	-	Power
$W$	-	Work
$COP$	-	Coefficient of performance
$q''$	-	Heat flux of per unit surface
$R$	-	Heat resistance

$R''$	-	Heat resistance per unit surface
$U$	-	Total heat transfer coefficient
$e$	-	Error
$h$	-	Enthalpy
$\mu$	-	Viscosity
$\rho$	-	Density
$v$	-	Specific volume
$K$	-	Conduction heat transfer coefficient
$T$	-	Temperature
$X$	-	Concentration
$P$	-	Pressure
$\alpha$	-	Convection heat transfer coefficient
$x$	-	Vapor quality
$L_{bb}$	-	Baffle spacing
$P_T$	-	Pitch
$\theta_T$	-	Tube angle
BC	-	Cuts of baffle
$f$	-	Coefficient of friction
LMTD	-	Logarithmic mean temperature difference
$F$	-	Coefficient of correction for LMTD
$\delta_r$	-	Characteristic thickness of falling film
$D_e$	-	Equivalent diameter
$\sigma$	-	Surface tension
$A$	-	Required heat transfer surface
$A_{p,o}$	-	External surface of the tube per unit length



$A_{p,i}$  - Inner surface of the tube per unit length

$L_{eff}$  - Effective length